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DANN, DORFMAN, HERRELL AND SKILLMAN
A Professional Corporation
1601 Market Street
Suite 720
Philadelphia, PA 19103-2307

NOV 20 2000

FAX CENTER 1600/2900

Telephone (215) 563-4100
Facsimile (215) 563-4044

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DATE: November 9, 2000

FROM: Kathleen D. Rigaut, Ph.D., J.D.

OPERATOR: Jane C. Bogan

RE: U.S. Patent Application No. 09/510,322
Anthony T. Yeung

Message: The official filing receipt shows a misspelling in the title of the application. Please correct the word Nucleid to read Nucleic. Transmitted herewith is a copy of the first sheet of the specification evidencing the correct spelling. It is further requested that a new official filing receipt be issued when the Patent and Trademark Office records have been corrected.

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CORRECTED FILING RECEIPT

OC000000005102590

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APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
09/510,322	02/22/2000	1643	777	FCCC	16	29	12

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DANN DORFMAN HERRELL & SKILLMAN
 SUITE 720
 1601 MARKET STREET
 PHILADELPHIA, PA 19103-2307

Date Mailed: 05/08/2000

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the PTO processes the reply to the Notice, the PTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Anthony T. Yeung, Huntingdon Valley, PA ;

Continuing Data as Claimed by Applicant**Foreign Applications****If Required, Foreign Filing License Granted 04/18/2000****** SMALL ENTITY ******Title**

Nucleic acid molecule encoding a mismatch endonuclease and methods of use thereof

Preliminary Class

435

Data entry by : JONES, DIANE

Team : OIPE

Date: 05/08/2000



**NUCLEIC ACID MOLECULE ENCODING A MISMATCH ENDONUCLEASE
AND METHODS OF USE THEREOF**

Anthony T. Yeung

Pursuant to 35 U.S.C. §202(c) it is acknowledged that the U.S. Government has certain rights in the invention described herein, which was made in part with funds from the National Institutes of Health, Grant Number, NIH CA71426.

FIELD OF THE INVENTION

This invention relates to materials and methods for the detection of mutations in targeted nucleic acids. More specifically, the invention 5 provides nucleic acid molecules encoding a mismatch specific nuclease and methods of use of the enzyme that facilitate the genetic screening of hereditary diseases and cancer. The method is also useful for the detection of genetic polymorphisms.

10

BACKGROUND OF THE INVENTION

Several publications are referenced in this application by numerals in parenthesis in order to more fully describe the state of the art to which this 15 invention pertains. Full citations for these references are found at the end of the specification. The disclosure of each of these publications is incorporated by reference in the present specification.

The sequence of nucleotides within a gene can 20 be mutationally altered or "mismatched" in any of several ways, the most frequent of which being base-pair substitutions, frame-shift mutations and deletions or insertions. These mutations can be induced by environmental factors, such as radiation and mutagenic chemicals; errors are also occasionally committed by DNA polymerases during replication. Many human disease 25

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Bib Data Sheet

SERIAL NUMBER 09/510,322	FILING DATE 02/22/2000 RULE	CLASS 435	GROUP ART UNIT 1643	ATTORNEY DOCKET NO. FCCC
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APPLICANTS

Anthony T. Yeung, Huntingdon Valley, PA ;

** CONTINUING DATA *****

** FOREIGN APPLICATIONS *****

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GRANTED ** 04/18/2000

** SMALL ENTITY **

Foreign Priority claimed	<input type="checkbox"/> yes <input type="checkbox"/> no	STATE OR COUNTRY PA	SHEETS DRAWING 16	TOTAL CLAIMS 29	INDEPENDENT CLAIMS 12
35 USC 119 (a-d) conditions met	<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> Met after Allowance				
Verified and Acknowledged	Examiner's Signature _____ Initials _____				

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110

TITLE

Nucleic acid molecule encoding a mismatch endonuclease and methods of use thereof

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